Deutsche Bank Markets Research



Rating Buy

Company Gree

Asia China

Consumer

Retail / Wholesale Trade

ReutersBloombergExchangeTicker000651.SZ000651 CHSHZ000651

Comments from Chairman Dong

On 9 December 2017, Gree's chairman Mingzhu Dong was invited by the China Entrepreneur Summit to give a speech on several topics, including Gree's automation strategy and 2017 performance:

- The automation reform and diversification strategy are bearing fruits. In her speech, Ms. Dong commented that Gree began to diversify its businesses in recent years. In addition air-conditioning business, it has entered into the field of small appliances, smart manufacturing, smart phones etc. Gree is undergoing automation reform. The company considered using the domestic equipment before, but it finally chose the imported German devices due to the higher precision. But as a long term plan, Gree decided to enter into the field of industrial manufacturing in 2013. Currently, Gree's CNC machine, and robots are not only provided for internal use, but also for other industries. Ms. Dong said that all of the devices in Zhuhai Silver Dargon (a company invested by Ms Dong privately) were produced by Gree.
- Preview of 2017 results. According to Ms. Dong, Gree 's 2017-ytd revenue increased RMB 40bn (2016 revenue: RMB108.3bn) as compared with last year's same period, and its NP margin was 15%.

Deutsche Bank view

With 2017 sales increased by RMB40bn, this implies 2017 total gross revenue will reach RMB148bn, which beat DB's forecast and market consensus by 5% and 4%, respectively. As for NP margin, her guidance is 0.3/0.8 ppt higher than DB's forecast (14.7%) and market consensus (14.2%), respectively. Management did not comment on Ms Dong's 2017 sales and NPM data.

Better product mix: an important positive in 2018 restocking that is not fully priced in. Gree's strong net margin could be driven by better product mix. In our recent channel checks we noticed that distributors (starting from the new air conditioner year) are focusing more on improving their product mix than in previous years, clearing inventory to recover cash. This may drive better profitability for air conditioner brands (on top of strong volume growth which is likely in the price). Profitability expansion should be universal, as Midea previously indicated that its core brand gross margin has improved by 2-3ppt YoY during

Date

12 December 2017

Company Update

Price at 11 Dec 2017 (CNY)	43.44
Price target - 12mth (CNY)	49.20
52-week range (CNY)	47.80 - 23.79
Shenzhen Index	2,008

Valuation & Risks

Anne Ling

Research Analyst +852-2203 6177

John Chou

Research Analyst +852-2203 6196

Price/price relative



Performance (%)	1m	3m	12m
Absolute	-4.9	17.1	60.9
Shenzhen Index	-5.9	-3.6	-7.3
Source: Deutsche Bank			

Key indicators (FY1)	
ROE (%)	36.2
Net debt/equity (%)	-179.1
Book value/share (CNY)	10.35
Price/book (x)	4.2
Net interest cover (x)	_
Operating profit margin (%)	16.4
Source: Deutsche Bank	

Deutsche Bank AG/Hong Kong

Deutsche Bank does and seeks to do business with companies covered in its res/Distributed on: 12/12/2017 11:27:07 GMT aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MCI (P) 083/04/2017. THE CONTENT MAY NOT BE DISTRIBUTED IN THE PEOPLE 'S REPUBLIC OF CHINA ("THE PRC") (EXCEPT IN COMPLIANCE WITH THE APPLICABLE LAWS AND REGULATIONS OF PRC), EXCLUDING SPECIAL ADMINISTRATIVE REGIONS OF HONG KONG AND MACAU.

Source: Deutsche Bank estimates, company data



3Q17 analyst meeting. In our model, we expect GPM for 4Q17F to reach 32.3% for Gree vs 3Q17's 30.9% and 4Q16's 29.4%.

Figure 1: DB forecast vs. Market forecast

		DD f		N 4 = -1	/ .	A 1	0/ -1		
		DB forecas	ot.	iviarke	t forecast (S	tandard)	% Cha	inge vs. m	iarket
RMBm	FY17E	FY18E	FY19E	FY17E	FY18E	FY19E	FY17E	FY18E	FY19E
Gross sales	142,451	158,411	175,222	142,184	157,735	176,489	0%	0%	-1%
EBIT	23,132	24,727	26,907	21,849	23,768	26,889	6%	4%	0%
EBIT margin	16.2%	15.6%	15.4%	15.4%	15.1%	15.2%	6%	4%	1%
Net profit	20,995	22,726	24,900	20,246	23,182	26,124	4%	-2%	-5%
NP margin	14.7%	14.3%	14.2%	14.2%	14.7%	14.8%	4%	-2%	-4%
Course Destroys Reals Clarenthers Finance I.B.									
	14.7%	14.3%	,	-, -	-, -	- /			

Forecasts and ratios Year End Dec 31 2015A 2016A 2017E 2018E 2019E Sales (CNYm) 99,812.6 108,682.7 141,026.4 156,827.0 173,469.9 EBITDA (CNYm) 14,315.1 15,515.4 24,862.1 26,524.8 28,787.4 Reported NPAT (CNYm) 12,532.4 15,421.0 20,995.0 22,726.5 24,899.5 Reported EPS FD(CNY) 2.08 2.56 3.49 3.78 DB EPS FD(CNY) 4.14 2.08 2.56 3.49 3.78 9.6 DB EPS growth (%) -11.5 23.0 36.1 8.2 12.4 10.5 PER (x) 10.3 8.3 11.5 EV/EBITDA (x) 2.7 2.3 5.7 4.6 3.5 DPS (net) (CNY) 1.50 1.50 2.09 2.27 2.48 7.1 Yield (net) (%) 7.0 4.8 5.2 5.7



Model updated: 13 November 2017
Running the numbers
Asia
China
Retail / Wholesale Trade

Gree

Reuters: 000651.SZ Bloomberg: 000651 CH

Buy

The second second	
Price (11 Dec 17)	CNY 43.44
Target Price	CNY 49.20
52 Week range	CNY 23.79 - 47.80
Market cap (m)	CNYm 261,323 USDm 39,492

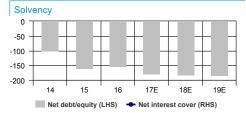
Company Profile

Gree is mainly engaged in the manufacture and distribution of household air conditioners and central air conditioners.









Anne Ling

+852 2203 6177 anne.ling@db.com

Fiscal year end 31-Dec	2014	2015	2016	2017E	2018E	2019E
Financial Summary						
DB EPS (CNY)	2.35	2.08	2.56	3.49	3.78	4.14
Reported EPS (CNY)	2.35	2.08	2.56	3.49	3.78	4.14
DPS (CNY) BVPS (CNY)	1.50 14.7	1.50 7.9	1.50 9.0	2.09 10.3	2.27 11.9	2.48 13.5
Weighted average shares (m)	6,016	6,016	6,016	6,016	6,016	6,016
Average market cap (CNYm) Enterprise value (CNYm)	83,062 28,595	128,915 38,315	127,585 36,239	261,323 140,692	261,323 122,075	261,323 102,167
Valuation Metrics						
P/E (DB) (x)	5.9	10.3	8.3	12.4	11.5	10.5
P/E (Reported) (x) P/BV (x)	5.9 1.20	10.3 2.83	8.3 2.75	12.4 4.20	11.5 3.66	10.5 3.21
FCF Yield (%)	20.2	34.2	11.6	16.1	12.4	13.4
Dividend Yield (%)	10.9	7.0	7.1	4.8	5.2	5.7
EV/Sales (x)	0.2	0.4	0.3	1.0	0.8	0.6
EV/EBITDA (x) EV/EBIT (x)	1.7 1.8	2.7 3.0	2.3 2.6	5.7 6.1	4.6 4.9	3.5 3.8
Income Statement (CNYm)						
Sales revenue	138,643	99,813	108,683	141,026	156,827	173,470
Gross profit	50,609	33,861	36,591 15,515	45,473	50,940	56,251
EBITDA Depreciation	17,171 1,357	14,315 1,338	15,515 1,838	24,862 1,730	26,525 1,798	28,787 1,881
Amortisation	0	0	0	0	0	0
EBIT Net interest income(expense)	15,814 942	12,977 1,929	13,678 4.846	23,132 2,092	24,727 2,577	26,907 3,009
Associates/affiliates	-4	3	8	6	6	6
Exceptionals/extraordinaries Other pre-tax income/(expense)	0	0	0 0	0	0	0
Profit before tax	16,752	14,909	18,531	25,229	27,310	29,921
Income tax expense Minorities	2,499 98	2,286 91	3,007 104	4,093 141	4,431 153	4,855 167
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	14,155	12,532	15,421	20,995	22,726	24,900
DB adjustments (including dilution) DB Net profit	0 14,155	0 12,532	0 15,421	0 20,995	0 22,726	0 24,900
Cash Flow (CNYm)						
Cash flow from operations	18,556	46,954	18,070	44,415	35,066	37,959
Net Capex Free cash flow	-1,777 16,779	-2,885 44,070	-3,277 14,793	-2,397 42,017	-2,666 32,400	-2,949 35,010
Equity raised/(bought back)	0	0	0	0	0	0
Dividends paid Net inc/(dec) in borrowings	-4,676 2,417	-9,525 1,526	-9,180 792	-12,597 0	-13,636 0	-14,940 11,363
Other investing/financing cash flows	1,483	-1,796	389	0	0	0
Net cash flow Change in working capital	16,004 6,559	34,274 32,374	6,793 -85	29,420 20,587	18,764 10,057	31,433 10,593
Balance Sheet (CNYm)						
Cash and other liquid assets	54,546	88,820	95,613	125,033	143,797	163,867
Tangible fixed assets Goodwill/intangible assets	17,948 0	18,588 0	21,636 0	22,303 0	23,171 0	24,239 0
Associates/investments	9,946	13,397	8,155	8,161	8,167	8,173
Other assets Total assets	73,791	40,894	56,965	69,833	76,120	82,741
Interest bearing debt	156,231 9,046	161,698 10,572	182,370 11,363	225,331 11,363	251,255 11,363	279,021 11,363
Other liabilities	102,054	102,560	116,083	150,505	167,186	184,824
Total liabilities Shareholders' equity	111,099 44,153	113,131 47,521	127,446 53,864	161,868 62,262	178,549 71,353	196,188 81,312
Minorities	979	1,045	1,060	1,201	1,354	1,521
Total shareholders' equity Net debt	45,131 -45,500	48,567 -78,248	54,924 -84,250	63,463 -113,670	72,706 -132,434	82,833 -152,504
Key Company Metrics						
Sales growth (%)	16.4	-28.0	8.9	29.8	11.2	10.6
DB EPS growth (%)	30.2	-11.5	23.0	36.1	8.2	9.6
EBITDA Margin (%) EBIT Margin (%)	12.4 11.4	14.3 13.0	14.3 12.6	17.6 16.4	16.9 15.8	16.6 15.5
Payout ratio (%)	63.7	72.0	58.5	60.0	60.0	60.0
ROE (%) Capex/sales (%)	36.0 1.3	27.3 2.9	30.4 3.0	36.2 1.7	34.0 1.7	32.6 1.7
Capex/depreciation (x)	1.3	2.2	1.8	1.4	1.5	1.6
Net debt/equity (%)	-100.8	-161.1	-153.4	-179.1	-182.1	-184.1
Net interest cover (x)	nm	nm	nm	nm	nm	nm

Source: Company data, Deutsche Securities estimates



Appendix 1

Important Disclosures

*Other information available upon request

Disclosure checklist			
Company	Ticker	Recent price*	Disclosure
Gree	000651.SZ	43.02 (CNY) 12 Dec 2017	14

^{*}Prices are current as of the end of the previous trading session unless otherwise indicated and are sourced from local exchanges via Reuters, Bloomberg and other vendors. Other information is sourced from Deutsche Bank, subject companies, and other sources. For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at http://gm.db.com/ger/disclosure/bisclosure/ page on our website at https://gm.db.com/ger/disclosure/ before investing. The provided in the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at https://gm.db.com/ger/disclosure/ page on our website at https://gm.db.com/ger/disclosure/ before investing.

Important Disclosures Required by U.S. Regulators

Disclosures marked with an asterisk may also be required by at least one jurisdiction in addition to the United States. See Important Disclosures Required by Non-US Regulators and Explanatory Notes.

14. Deutsche Bank and/or its affiliate(s) has received non-investment banking related compensation from this company within the past year.

Important Disclosures Required by Non-U.S. Regulators

Disclosures marked with an asterisk may also be required by at least one jurisdiction in addition to the United States. See Important Disclosures Required by Non-US Regulators and Explanatory Notes.

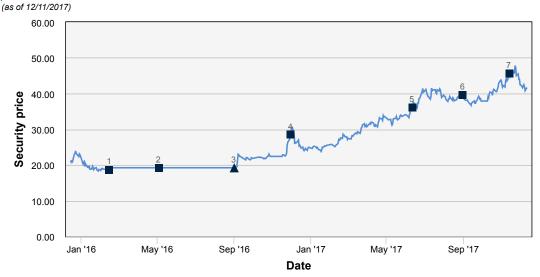
For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at http://gm.db.com/ger/disclosure/Disclosure/Directory.eqsr

Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s) about the subject issuer and the securities of the issuer. In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Anne Ling



Historical recommendations and target price. Gree (000651.SZ)



Current Recommendations

Buy Hold Sell Not Rated Suspended Rating

** Analyst is no longer at Deutsche Bank

1.	02/15/2016	Hold, Target Price Change CNY 16,29 Richard Rui- Huang**
2.	05/04/2016	Hold, Target Price Change CNY 18,10 Richard Rui- Huang**
3.	09/01/2016	Upgraded to Buy, Target Price Change CNY 24,91 Richard Rui-Huang**
4.	11/30/2016	Buy, Target Price Change CNY 28,48 Richard Rui- Huang**

06/12/2017 Buy, Target Price Change CNY 38,87 Anne Ling
 08/31/2017 Buy, Target Price Change CNY 44,40 Anne Ling
 11/13/2017 Buy, Target Price Change CNY 49,20 John Chou

Equity Rating Key

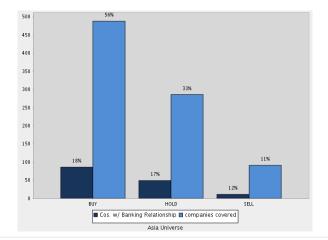
Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus pro-jected dividend yield), we recommend that investors buy the stock.

Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock.

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Newly issued research recommendations and target prices supersede previously published research.

Equity rating dispersion and banking relationships



12 December 2017 Retail / Wholesale Trade Gree



Additional Information

The information and opinions in this report were prepared by Deutsche Bank AG or one of its affiliates (collectively "Deutsche Bank"). Though the information herein is believed to be reliable and has been obtained from public sources believed to be reliable, Deutsche Bank makes no representation as to its accuracy or completeness. Hyperlinks to third-party websites in this report are provided for reader convenience only. Deutsche Bank neither endorses the content nor is responsible for the accuracy or security controls of those websites.

If you use the services of Deutsche Bank in connection with a purchase or sale of a security that is discussed in this report, or is included or discussed in another communication (oral or written) from a Deutsche Bank analyst, Deutsche Bank may act as principal for its own account or as agent for another person.

Deutsche Bank may consider this report in deciding to trade as principal. It may also engage in transactions, for its own account or with customers, in a manner inconsistent with the views taken in this research report. Others within Deutsche Bank, including strategists, sales staff and other analysts, may take views that are inconsistent with those taken in this research report. Deutsche Bank issues a variety of research products, including fundamental analysis, equity-linked analysis, quantitative analysis and trade ideas. Recommendations contained in one type of communication may differ from recommendations contained in others, whether as a result of differing time horizons, methodologies, perspectives or otherwise. Deutsche Bank and/or its affiliates may also be holding debt or equity securities of the issuers it writes on. Analysts are paid in part based on the profitability of Deutsche Bank AG and its affiliates, which includes investment banking, trading and principal trading revenues.

Opinions, estimates and projections constitute the current judgment of the author as of the date of this report. They do not necessarily reflect the opinions of Deutsche Bank and are subject to change without notice. Deutsche Bank provides liquidity for buyers and sellers of securities issued by the companies it covers. Deutsche Bank research analysts sometimes have shorter-term trade ideas that may be inconsistent with Deutsche Bank's existing longer-term ratings. Trade ideas for equities can be found at the SOLAR link at http://gm.db.com. A SOLAR idea represents a high-conviction belief by an analyst that a stock will outperform or underperform the market and/or a specified sector over a time frame of no less than two weeks and no more than six months. In addition to SOLAR ideas, analysts may occasionally discuss with our clients, and with Deutsche Bank salespersons and traders, trading strategies or ideas that reference catalysts or events that may have a near-term or medium-term impact on the market price of the securities discussed in this report, which impact may be directionally counter to the analysts' current 12-month view of total return or investment return as described herein. Deutsche Bank has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof if an opinion, forecast or estimate changes or becomes inaccurate. Coverage and the frequency of changes in market conditions and in both general and company-specific economic prospects make it difficult to update research at defined intervals. Updates are at the sole discretion of the coverage analyst or of the Research Department Management, and the majority of reports are published at irregular intervals. This report is provided for informational purposes only and does not take into account the particular investment objectives, financial situations, or needs of individual clients. It is not an offer or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy. Target prices are inherently imprecise and a product of the analyst 's judgment. The financial instruments discussed in this report may not be suitable for all investors, and investors must make their own informed investment decisions. Prices and availability of financial instruments are subject to change without notice, and investment transactions can lead to losses as a result of price fluctuations and other factors. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Performance calculations exclude transaction costs, unless otherwise indicated. Unless otherwise indicated, prices are current as of the end of the previous trading session and are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is also sourced from Deutsche Bank, subject companies, and other parties.

The Deutsche Bank Research Department is independent of other business divisions of the Bank. Details regarding organizational arrangements and information barriers we have established to prevent and avoid conflicts of interest with respect to our research are available on our website under Disclaimer, found on the Legal tab.

12 December 2017 Retail / Wholesale Trade Gree



Macroeconomic fluctuations often account for most of the risks associated with exposures to instruments that promise to pay fixed or variable interest rates. For an investor who is long fixed-rate instruments (thus receiving these cash flows), increases in interest rates naturally lift the discount factors applied to the expected cash flows and thus cause a loss. The longer the maturity of a certain cash flow and the higher the move in the discount factor, the higher will be the loss. Upside surprises in inflation, fiscal funding needs, and FX depreciation rates are among the most common adverse macroeconomic shocks to receivers. But counterparty exposure, issuer creditworthiness, client segmentation, regulation (including changes in assets holding limits for different types of investors), changes in tax policies, currency convertibility (which may constrain currency conversion, repatriation of profits and/or liquidation of positions), and settlement issues related to local clearing houses are also important risk factors. The sensitivity of fixedincome instruments to macroeconomic shocks may be mitigated by indexing the contracted cash flows to inflation, to FX depreciation, or to specified interest rates – these are common in emerging markets. The index fixings may – by construction - lag or mis-measure the actual move in the underlying variables they are intended to track. The choice of the proper fixing (or metric) is particularly important in swaps markets, where floating coupon rates (i.e., coupons indexed to a typically short-dated interest rate reference index) are exchanged for fixed coupons. Funding in a currency that differs from the currency in which coupons are denominated carries FX risk. Options on swaps (swaptions) the risks typical to options in addition to the risks related to rates movements.

Derivative transactions involve numerous risks including market, counterparty default and illiquidity risk. The appropriateness of these products for use by investors depends on the investors' own circumstances, including their tax position, their regulatory environment and the nature of their other assets and liabilities; as such, investors should take expert legal and financial advice before entering into any transaction similar to or inspired by the contents of this publication. The risk of loss in futures trading and options, foreign or domestic, can be substantial. As a result of the high degree of leverage obtainable in futures and options trading, losses may be incurred that are greater than the amount of funds initially deposited – up to theoretically unlimited losses. Trading in options involves risk and is not suitable for all investors. Prior to buying or selling an option, investors must review the "Characteristics and Risks of Standardized Options", at http://www.optionsclearing.com/about/publications/character-risks.jsp. If you are unable to access the website, please contact your Deutsche Bank representative for a copy of this important document.

Participants in foreign exchange transactions may incur risks arising from several factors, including: (i) exchange rates can be volatile and are subject to large fluctuations; (ii) the value of currencies may be affected by numerous market factors, including world and national economic, political and regulatory events, events in equity and debt markets and changes in interest rates; and (iii) currencies may be subject to devaluation or government-imposed exchange controls, which could affect the value of the currency. Investors in securities such as ADRs, whose values are affected by the currency of an underlying security, effectively assume currency risk.

Deutsche Bank is not acting as a financial adviser, consultant or fiduciary to you or any of your agents with respect to any information provided in this report. Deutsche Bank does not provide investment, legal, tax or accounting advice, and is not acting as an impartial adviser. Information contained herein is being provided on the basis that the recipient will make an independent assessment of the merits of any investment decision, and is not meant for retirement accounts or for any specific person or account type. The information we provide is directed only to persons we believe to be financially sophisticated, who are capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies, and who understand that Deutsche Bank has financial interests in the offering of its products and services. If this is not the case, or if you or your agent are an IRA or other retail investor receiving this directly from us, we ask that you inform us immediately.

Unless governing law provides otherwise, all transactions should be executed through the Deutsche Bank entity in the investor's home jurisdiction. Aside from within this report, important risk and conflict disclosures can also be found at https://gm.db.com on each company 's research page and under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

United States: Approved and/or distributed by Deutsche Bank Securities Incorporated, a member of FINRA, NFA and SIPC. Analysts located outside of the United States are employed by non-US affiliates that are not subject to FINRA regulations, including those regarding contacts with issuer companies.



Germany: Approved and/or distributed by Deutsche Bank AG, a joint stock corporation with limited liability incorporated in the Federal Republic of Germany with its principal office in Frankfurt am Main. Deutsche Bank AG is authorized under German Banking Law and is subject to supervision by the European Central Bank and by BaFin, Germany 's Federal Financial Supervisory Authority.

United Kingdom: Approved and/or distributed by Deutsche Bank AG acting through its London Branch at Winchester House, 1 Great Winchester Street, London EC2N 2DB. Deutsche Bank AG in the United Kingdom is authorised by the Prudential Regulation Authority and is subject to limited regulation by the Prudential Regulation Authority and Financial Conduct Authority. Details about the extent of our authorisation and regulation are available on request.

Hong Kong: Distributed by Deutsche Bank AG, Hong Kong Branch or Deutsche Securities Asia Limited.

India: Prepared by Deutsche Equities India Private Limited (DEIPL) having CIN: U65990MH2002PTC137431 and registered office at 14th Floor, The Capital, C-70, G Block, Bandra Kurla Complex Mumbai (India) 400051. Tel: + 91 22 7180 4444. It is registered by the Securities and Exchange Board of India (SEBI) as a Stock broker bearing registration nos.: NSE (Capital Market Segment) - INB231196834, NSE (F&O Segment) INF231196834, NSE (Currency Derivatives Segment) INE231196834, BSE (Capital Market Segment) INB011196830; Merchant Banker bearing SEBI Registration no.: INM000010833 and Research Analyst bearing SEBI Registration no.: INH000001741. DEIPL may have received administrative warnings from the SEBI for breaches of Indian regulations. Deutsche Bank and/or its affiliate(s) may have debt holdings or positions in the subject company. With regard to information on associates, please refer to the "Shareholdings" section in the Annual Report at: https://www.db.com/ir/en/annual-reports.htm.

Japan: Approved and/or distributed by Deutsche Securities Inc.(DSI). Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, Type II Financial Instruments Firms Association and The Financial Futures Association of Japan. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations. We may also charge commissions and fees for certain categories of investment advice, products and services. Recommended investment strategies, products and services carry the risk of losses to principal and other losses as a result of changes in market and/or economic trends, and/or fluctuations in market value. Before deciding on the purchase of financial products and/or services, customers should carefully read the relevant disclosures, prospectuses and other documentation. "Moody's", "Standard & Poor's", and "Fitch" mentioned in this report are not registered credit rating agencies in Japan unless Japan or "Nippon" is specifically designated in the name of the entity. Reports on Japanese listed companies not written by analysts of DSI are written by Deutsche Bank Group's analysts with the coverage companies specified by DSI. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan. Target prices set by Deutsche Bank's equity analysts are based on a 12-month forecast period..

Korea: Distributed by Deutsche Securities Korea Co.

South Africa: Deutsche Bank AG Johannesburg is incorporated in the Federal Republic of Germany (Branch Register Number in South Africa: 1998/003298/10).

Singapore: This report is issued by Deutsche Bank AG, Singapore Branch or Deutsche Securities Asia Limited, Singapore Branch (One Raffles Quay #18-00 South Tower Singapore 048583, +65 6423 8001), which may be contacted in respect of any matters arising from, or in connection with, this report. Where this report is issued or promulgated by Deutsche Bank in Singapore to a person who is not an accredited investor, expert investor or institutional investor (as defined in the applicable Singapore laws and regulations), they accept legal responsibility to such person for its contents.

Taiwan: Information on securities/investments that trade in Taiwan is for your reference only. Readers should independently evaluate investment risks and are solely responsible for their investment decisions. Deutsche Bank research may not be distributed to the Taiwan public media or quoted or used by the Taiwan public media without written consent. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be

12 December 2017 Retail / Wholesale Trade Gree



construed as a recommendation to trade in such securities/instruments. Deutsche Securities Asia Limited, Taipei Branch may not execute transactions for clients in these securities/instruments.

Qatar: Deutsche Bank AG in the Qatar Financial Centre (registered no. 00032) is regulated by the Qatar Financial Centre Regulatory Authority. Deutsche Bank AG - QFC Branch may undertake only the financial services activities that fall within the scope of its existing QFCRA license. Its principal place of business in the QFC: Qatar Financial Centre, Tower, West Bay, Level 5, PO Box 14928, Doha, Qatar. This information has been distributed by Deutsche Bank AG. Related financial products or services are only available only to Business Customers, as defined by the Qatar Financial Centre Regulatory Authority.

Russia: The information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.

Kingdom of Saudi Arabia: Deutsche Securities Saudi Arabia LLC Company (registered no. 07073-37) is regulated by the Capital Market Authority. Deutsche Securities Saudi Arabia may undertake only the financial services activities that fall within the scope of its existing CMA license. Its principal place of business in Saudi Arabia: King Fahad Road, Al Olaya District, P.O. Box 301809, Faisaliah Tower - 17th Floor, 11372 Riyadh, Saudi Arabia.

United Arab Emirates: Deutsche Bank AG in the Dubai International Financial Centre (registered no. 00045) is regulated by the Dubai Financial Services Authority. Deutsche Bank AG - DIFC Branch may undertake only the financial services activities that fall within the scope of its existing DFSA license. Its principal place of business in the DIFC: Dubai International Financial Centre, The Gate Village, Building 5, PO Box 504902, Dubai, U.A.E. This information has been distributed by Deutsche Bank AG. Related financial products or services are available only to Professional Clients, as defined by the Dubai Financial Services Authority.

Australia: Retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product. Please refer to Australia-specific research disclosures and related information at https://australia.db.com/australia/content/research-information.html

Australia and New Zealand: This research is intended only for "wholesale clients" within the meaning of the Australian Corporations Act and New Zealand Financial Advisors Act, respectively.

Additional information relative to securities, other financial products or issuers discussed in this report is available upon request. This report may not be reproduced, distributed or published without Deutsche Bank's prior written consent. Copyright © 2017 Deutsche Bank AG



David Folkerts-Landau

Group Chief Economist and Global Head of Research

Raj Hindocha Global Chief Operating Officer Research

Michael Spencer Head of APAC Research Global Head of Economics

Steve Pollard Head of Americas Research Global Head of Equity Research

Anthony Klarman Global Head of Debt Research

Paul Reynolds Head of EMEA **Equity Research**

Dave Clark Head of APAC **Equity Research**

Pam Finelli Global Head of **Equity Derivatives Research**

Andreas Neubauer Head of Research - Germany

Spyros Mesomeris Global Head of Quantitative and QIS Research

International Production Locations

Deutsche Bank AG

Deutsche Bank Place Level 16

Corner of Hunter & Phillip Streets Sydney, NSW 2000 Australia

Tel: (61) 2 8258 1234

Tel: (49) 69 910 00

Deutsche Bank AG London

1 Great Winchester Street London EC2N 2EQ United Kingdom Tel: (44) 20 7545 8000

Deutsche Bank AG

Mainzer Landstrasse 11-17 60329 Frankfurt am Main

Germany

Deutsche Bank Securities Inc.

60 Wall Street New York, NY 10005 United States of America Tel: (1) 212 250 2500

Deutsche Bank AG

Filiale Hongkong International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong Tel: (852) 2203 8888

Deutsche Securities Inc.

2-11-1 Nagatacho Sanno Park Tower Chiyoda-ku, Tokyo 100-6171 Japan

Tel: (81) 3 5156 6770